

CLAIMS

What is claimed is:

1. A disk drive, comprising:
a disk-shaped storage medium supported for rotation;
a moving member supporting a read/write head for reading recorded data from the disk-shaped storage medium and writing data to the disk-shaped storage medium, and moving the head between a read/write position where the head is able to read data from and write data to the disk-shaped storage medium and a home position where the head is separated from the disk-shaped storage medium; and
a latching mechanism for securely holding the moving member in place when the head is located at the home position, and of remaining separate from the moving member when the head is located at the read/write position.
2. The disk drive of claim 1, wherein the latching mechanism is an inertial latching mechanism that operates in response to an external shock.
3. The disk drive of claim 1, wherein the moving member is supported for turning about an axis of turning, and has one end supporting a head slider that holds the head and another end for being latched by the latching mechanism.
4. The disk drive of claim 1, wherein the moving member is held in place by the latching mechanism when the head is located at the home position, and is formed in a shape such that the latching mechanism is unable to latch the moving member when the head is located at the read/write position.

5. The disk drive of claim 1, wherein the latching mechanism has a latching arm that moves in a predetermined allowable moving range in response to an external shock; and

the latching arm latches the moving member in the allowable moving range when the head is located at the home position, and remains separate from the moving member in the allowable moving range when the head is located at the read/write position.

6. A disk drive, comprising:
 - a disk-shaped storage medium supported for rotation;
 - a head slider holding a read/write head for reading recorded data from the disk-shaped storage medium and writing data to the disk-shaped storage medium;
 - a moving member supporting the head slider and placing the head slider at a read/write position on the disk-shaped storage medium, and retracting the head slider from the read/write position on the disk-shaped storage medium; and
 - a latching mechanism capable for latching the moving member in place when the head slider is retracted from a read/write position on the disk-shaped storage medium to a home position, and remaining separate from the moving member when the head slider is located at the read/write position on the disk-shaped storage medium.
7. The disk drive of claim 6, wherein the latching mechanism is an inertial latching mechanism that operates in response to an external shock.
8. The disk drive of claim 6, further comprising a ramp for holding the retracted head slider, wherein the latching mechanism latches the moving member in a state where the head slider is held by the ramp.

9. A disk drive, comprising:

a disk-shaped storage medium supported for rotation;

a read/write head for reading recorded data from the disk-shaped storage medium and writing data to the disk-shaped storage medium;

an arm supported for turning on a shaft, having a part extending on one side of the shaft and supporting the read/write head, and another part extending on another side of the shaft and having a driving mechanism to move the read/write head between a read/write position where the read/write head reads recorded data from and writes data to the disk-shaped storage medium, and a home position where the read/write head is separated from the disk-shaped storage medium; and

a latching mechanism capable of securely latching the arm at the home position; and wherein

the arm has a lever that is separated from the latching mechanism in a moving range of the latching mechanism when the read/write head is located at the read/write position.

10. The disk drive of claim 9, wherein the latching mechanism is an inertial latching mechanism that operates in response to an external shock.

11. The disk drive of claim 9, wherein the latching mechanism has a latching arm that moves in a predetermined allowable moving range in response to an external shock, and the latching arm latches the lever in the allowable moving range when the head slider is located at the home position, and remains separate from the lever when the head slider is located at the read/write position.

12. The disk drive of claim 9, wherein the lever is formed in a shape such that the lever is outside an allowable moving range for the latching mechanism when the read/write head is located at the read/write position.

13. The disk drive of claim 9, wherein the lever has a recessed part for avoiding interference between the lever and the latching mechanism.

14. The disk drive of claim 9, further comprising a ramp for holding the head slider at the home position, wherein the latching mechanism latches the moving member in a state where the head slider is held by the ramp.